

Appl. No. 09/607,536  
Amd. Dated November 6, 2003  
Reply to Office Action of June 25, 2003

**Amendment to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-7 (canceled)

Claim 8 (currently amended): A substrate having polymer probes coupled thereto, comprising:

a plurality of regions on the substrate in which diverse polymer probes are coupled; and  
a plurality of regions on the substrate in which polymer probes having the same desired sequence are coupled, wherein the polymer probes having the same desired sequence will bind with a control sequence of monomers but the polymer probes are formed with at least one different monomer addition cycle and at least one of the polymer probes does not have the same actual sequence as a result of a different monomer addition cycle; and

a plurality of labeled control targets hybridized to the polymer probes having the same desired sequence wherein there is lower hybridization of the plurality of labeled control targets to the at least one of the polymer probes that does not have the same actual sequence.

Claim 9 (previously presented): The substrate of claim 8, wherein the plurality of regions are at the center of the substrate.

Claim 10 (original): The substrate of claim 8, wherein the plurality of regions are in a checkerboard pattern on the substrate.

Claims 11-23 (canceled)

Claim 24 (currently amended) A substrate having nucleic acid probes coupled thereto, comprising:

a plurality of regions on the substrate in which diverse nucleic acid probes are coupled;  
**and**

a plurality of regions on the substrate in which nucleic acid probes having the same desired sequence are coupled, wherein the nucleic acid probes having the same desired sequence will bind with a control sequence of nucleotides but the nucleic acid probes are formed with at least one different nucleotide addition cycle and at least one of the nucleic acid probes does not have the same actual sequence as a result of a different nucleotide addition cycle; and

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a plurality of labeled control targets hybridized to the nucleic acid probes having the same desired sequence wherein there is lower hybridization of the plurality of labeled control targets to the at least one of the nucleic acid probes that does not have the same actual sequence.

Claim 25 (original): The substrate of claim 24, wherein the plurality of regions are at the center of the substrate.

Claim 26 (original): The substrate of claim 24, wherein the plurality of regions are in a checkerboard pattern on the substrate.